UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/465,236	12/15/1999	JOSEPH C. HARROW	062891.0311	8644

5073	7590	08/03/2006

BAKER BOTTS L.L.P.
2001 ROSS AVENUE
SUITE 600
DALLAS, TX 75201-2980

EXAMINER
MEW, KEVIN D

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 08/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	**Applicant(s)**
Office Action Summary	09/465,236	HARROW ET AL.
	Examiner	**Art Unit**	
	Kevin Mew	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>10 May 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-14 and 32-40* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-14, 32-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

Detailed Action

1.   Applicant's Remarks/Arguments filed 5/10/2006 regarding claims 32-40 have been

considered. Claims 1, 8, 31 have been canceled and claims 15-30 have been withdrawn by

applicant. Claims 2-7, 9-14, 32-40 are currently pending.

2.   Applicant's arguments submitted in the appeal brief are persuasive and, therefore, after

further consideration by the examiner, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
patent by another filed in the United States before the invention by the applicant for patent, except that an
international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
subsection of an application filed in the United States only if the international application designated the United
States and was published under Article 21(2) of such treaty in the English language.

3.   Claims 2, 7, 9, 14, 38-39 are rejected under 35 U.S.C. 102(e) as being anticipated by

Botzko et al. (USP 6,141,597).

Regarding claims 38, 39, Botzko discloses an apparatus to perform a method of using a

plurality of processors to support a media conference (a conferencing system/apparatus for using

a plurality of audio processors and decoders, Fig. 2), comprising:

a mixing processor (mixer, element 28, Fig. 3) operable to perform a method for mixing

input media information (to mix uncompressed audio input streams) associated with two or more

first participants (associated with participants in sites A, B, C) to generate output media

information (generates output audio information, element 35, Fig. 3) for communication to a

second participant (for communication to participant in site D); and

a first media transformation processor (encoder, element 29, Fig. 3) coupled to the

mixing processor (coupled to the mixer, elements 28, Fig, 3), the first media transformation

processor operable to perform receiving the output media information from the mixing processor

(the encoder 29 is to receive the output audio processor information from the mixer 28, Fig. 3),

to encode the output media information to generate an output data stream (to encode the

uncompressed audio of mixed audio signals to generate compressed audio of mixed audio

signals), and to perform communicating the output data stream to the second participant's end-

user device (to communicate the compressed audio through line 20c to site C, Fig. 3), wherein

the mixing processor and the first media transformation processor are separate hardware

components (mixer and encoder are separate hardware components, col. 6, lines 46-67, 1-39, and

elements 28, 29, Fig. 3).

Regarding claims 2, 9, Botzko discloses the apparatus of Claim 38, further comprising

a second media transformation processor (decoder, element 18a) coupled to the mixing processor

(coupled to the audio processor 14c that comprises a mixer, Figs. 2 and 3), the second

media transformation processor (decoder) operable to perform receiving an input data stream

from a first participant's end-user device (decoder receives an input stream from the first

participant of site A, element 18a, Fig. 2), to perform decoding the input data stream to generate

input media information associated with the first participant (to decode to generate

uncompressed audio signal input stream associated with the participant in site A), and to perform

communicating the input media information associated with the first participant to the mixing

processor (to communicate the uncompressed audio 19a to the mixer 28 of the audio processor

14c, Figs. 2 and 3).

Regarding claims 7, 14, Botzko discloses the apparatus of Claim 38, wherein the

media conference is a voice telephone conference and the media information is voice

information (audio conferencing system, col. 3, lines 65-67, and element 12, Fig. 2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 3-4, 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Botzko

et al. in view of Gregory, III et al. (USP 5,793,415).

Regarding claim 3, Botzko discloses all the aspects of the claimed invention as set forth

in the rejection of claim 38 above, except fails to disclose the first media transformation

processor is further operable to receive an input data stream from the second participant's end-

user device, to decode the input data stream to generate input media information associated with

the second participant, and to communicate the input media information associated with the

second participant to the mixing processor.

However, Gregory discloses a multimedia conferencing system in which the decoder of

CODEC is used to decode data received from a remote videoconference site via an ISDN

network and the audio signals received are processed by the CODEC and output to an audio

mixer (col. 3, lines 35-42, col. 4, lines 1-7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the audio conferencing system of Botzko with the teaching of

Gregory in using a decoder to decode data received from a remote conference site to audio signal

and output the audio signal to a mixer such that the encoder in Botzko will be modified to

become the CODEC of Gregory such that besides having the encoder function of the CODEC,

the CODEC's decoder will receive an input data stream from the second participant's end-user

device, to decode the input data stream to generate input media information associated with the

second participant, and to communicate the input media information associated with the second

participant to the mixing processor.

The motivation to do so is to recover the original audio signal by converting the data

received from a remote conference site into audio signal output.

Regarding claim 4, Botzko discloses all the aspects of the claimed invention as set forth

in the rejection of claim 38 above, except fails to disclose the apparatus of Claim 38, wherein the

mixing processor is further operable to receive an input data stream from a first participant's end-

user device and to decode the input data stream to generate input media information

associated with the first participant.

However, Gregory discloses a multimedia conferencing system in which the decoder of

CODEC is used to decode data received from a remote videoconference site via an ISDN

network and the audio signals received are processed by the CODEC and output to an audio

mixer (col. 3, lines 35-42, col. 4, lines 1-7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the audio conferencing system of Botzko with the teaching of

Gregory in using a decoder to decode data received from a remote conference site to audio signal

and output the audio signal to a mixer such that the mixer in Botzko will be modified to perform

both the decoding and mixing functions such that the mixer is further operable to receive an

input data stream from a first participant's end-user device and to decode the input data stream to

generate input media information associated with the first participant.

The motivation to do so is to recover the original audio signal by converting the data

received from a remote conference site into audio signal output.

Regarding claim 10, Botzko discloses discloses all the aspects of the claimed invention as

set forth in the rejection of claim 39 above, except fails to disclose the method of Claim 39,

further comprising:

receiving at the first media transformation processor an input data stream from the second

participant's end-user device;

decoding the input data stream to generate input media information associated with the

second participant;

communicating the input media information associated with the second

participant (communicating the uncompressed audio 19c to the audio processor 14a, Fig. 2) from

the first media transformation processor to the mixing processor; and

mixing the input media information associated with the second participant with

input media information from one or more other participants to generate output media

information for communication to a first participant.

However, Gregory discloses a multimedia conferencing system in which the decoder of

CODEC is used to decode data received from a remote videoconference site via an ISDN

network and the audio signals received are processed by the CODEC and output to an audio

mixer (col. 3, lines 35-42, col. 4, lines 1-7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the audio conferencing system of Botzko with the teaching of

Gregory in using a decoder to decode data received from a remote conference site to audio signal

and output the audio signal to a mixer such that the encoder in Botzko will be modified to

become the CODEC of Gregory such that besides having the encoder function of the CODEC,

the CODEC's decoder will receive an input data stream from the second participant's end-user

device, to decode the input data stream to generate input media information associated with the

second participant, and to communicate the input media information associated with the second

participant to the mixing processor.

The motivation to do so is to recover the original audio signal by converting the data

received from a remote conference site into audio signal output.

Regarding claim 11, Botzko discloses all the aspects of the claimed invention as set forth

in the rejection of claim 39 above, except fails to disclose the method of Claim 39, further

comprising: receiving at the mixing processor an input data stream from a first participant's end-

user device; and decoding the input data stream to generate input media information associated

with the first participant.

However, Gregory discloses a multimedia conferencing system in which the decoder of

CODEC is used to decode data received from a remote videoconference site via an ISDN

network and the audio signals received are processed by the CODEC and output to an audio

mixer (col. 3, lines 35-42, col. 4, lines 1-7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the audio conferencing system of Botzko with the teaching of

Gregory in using a decoder to decode data received from a remote conference site to audio signal

and output the audio signal to a mixer such that the mixer in Botzko will be modified to perform

both the decoding and mixing functions such that the mixer is further operable to receive an

input data stream from a first participant's end-user device and to decode the input data stream to

generate input media information associated with the first participant.

The motivation to do so is to recover the original audio signal by converting the data

received from a remote conference site into audio signal output.

5.   Claims 5-6, 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Botzko

et al. in view of Leondires et al. (USP 5,841,763).

Regarding claims 5, 6, Botzko discloses all the aspects of the claimed invention as set forth in the rejection of claim 38 above, except fails to disclose the mixing processor and the first media transformation processor are separate digital signal processors (DSPs)/integrated circuits.

However, Leondires discloses an audio-video conferencing system wherein the encoder and the mixer are separate DSPs/Integrated Circuits (one DSP/Integrated Circuits 260 for mixing, another DSP/Integrated Circuits 266 for encoding audio signals, col. 14, lines 23-29, col. 17, lines 16-21, 36-41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the audio conferencing system of Botzko with the teaching of Leondires in using separate DSPs/integrated circuits for the mixer and the encoder such that the mixer of Botzko will be one DSP/integrated circuit and the encoder of Botzko will be another DSP/integrated circuit.

The motivation to do is to allocate each DSP to a particular function to avoid using electronic hardware.

Regarding claims 12, 13, Botzko discloses all the aspects of the claimed invention as set forth in the rejection of claim 39 above, except fails to disclose the mixing processor and the first media transformation processor are separate digital signal processors (DSPs)/integrated circuits.

However, Leondires discloses an audio-video conferencing system wherein the encoder and the mixer are separate DSPs/Integrated Circuits (one DSP/Integrated Circuits 260 for mixing, another DSP/Integrated Circuits 266 for encoding audio signals, col. 14, lines 23-29, col. 17, lines 16-21, 36-41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the audio conferencing system of Botzko with the teaching of

Leondires in using separate DSPs/integrated circuits for the mixer and the encoder such that the

mixer of Botzko will be one DSP/integrated circuit and the encoder of Botzko will be another

DSP/integrated circuit.

The motivation to do is to allocate each DSP to a particular function to avoid using

electronic hardware.

6.   Claims 32-33, 37, 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Botzko et al. in view of Celli (USP 5,020,098).

Regarding claim 40, Botzko discloses a system for using a plurality of processors to

support a media conference, comprising:

a conferencing device (conferencing system, element 15, Fig. 2) coupled to the data

network (local area network), the conferencing device (the conferencing system 15, Fig. 2)

comprising two or more processors operable (the conferencing system 15 comprises a plurality

of decoders, elements 18a, 18b , 18c, 18d, Fig. 2) to decode the input data streams to generate

the input media information (to decode input audio information, Fig. 2), to mix the input media

information to generate output media information (mixer to mix uncompressed audio signals

from sites A, B, C, element 28, Fig. 3), and to encode the output media information to generate

output data streams (encoder to encode the uncompressed audio of mixed audio signals to

generate compressed audio of mixed audio signals, element 29, Fig. 3), wherein the processors

are separate hardware components (decoder, mixer, encoder are separate hardware components, Figs. 2 and 3);

Botzko does not explicitly show a plurality of end-user devices coupled to a data network and operable to generate input media information, to encode the input media information to generate input data streams, and to communicate the input data streams using the data network, and the end-user devices are further operable to receive the output data streams and to decode the output data streams to generate output media information.

However, Celli discloses an audio telephone conferencing system in which the end-user devices coupled to a digital data network (Figs. 2 and 3) will generate audio out signals from the directional circuitry 33, encode the audio out signals by DSP 36 (Fig. 3) to generate input data streams and communicate the input data streams to the data network via a network interface (col. 3, lines 54-67, col. 4, lines 1-20 and Fig. 3), and will also receive data streams from a digital network and decode the data streams by DSP 39 to audio signals (col. 4, lines 21-43 and Fig. 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the audio conferencing system and method of Botzko with the teaching of Celli in using end-user devices that will receive audio information and encode the audio information to data streams to be transmitted through a data network such that the end-user devices of Botkzo will incorporate the features of the end-user devices disclosed in Celli.

The motivation to do so is to perform CCITT G.722 encoding of audio signals before transmitting to a digital network and CCITT G.722 decoding of packet data streams from a digital network.

Regarding claim 32, Botzko discloses the system of Claim 40, wherein the

conferencing device (conferencing system, element 15, Fig. 2) further comprises a mixing

processor operable to mix the input media information (mixer 28 of the audio processor 14c to

mix uncompressed audio signals, Fig. 3) to generate the output media information (to generate

output audio); and information and one or more media transformation processors (encoder,

element 28, Fig. 3) operable to encode the output media information to generate the output data

streams (to encode mixed audio of uncompressed audio signals to mixed audio of compressed

audio signals, Fig. 3).

Regarding claim 33, Botzko discloses the system of Claim 40, wherein the

conferencing device further comprises one or more media transformation processors (decoder,

element 18a, Fig. 2) operable to decode the input data streams to generate the input media

information (to decode compressed audio packets to generate uncompressed audio, Fig. 2); and

information and a mixing processor (mixer, element 28, Fig. 3) operable to mix the input media

information to generate the output media information (to mix uncompressed audio signals from

sites A, B, D to generate compressed audio, Fig. 3).

Regarding claim 37, Botzko discloses the system of Claim 40, wherein the

media conference is a voice telephone conference and the media information is voice

information (audio conferencing system, col. 3, lines 65-67, and element 12, Fig. 2).

7.   Claims 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Botzko et

al. in view of Celli, and in further view of Leondires et al. (USP 5,841,763).

Regarding claim 34, the combined system of Botzko and Celli discloses all the aspects of

the claimed invention as set forth in the rejection of claim 40 above, except fails to disclose the

system of Claim 40, wherein the conferencing device is further operable to identify a coding

standard used by a participant's end-user device to encode input media information and to encode

output media information for communication to the participant's end-user device using the

identified coding standard.

However, Leondires discloses an audio-video conferencing system for performing audio

encoding and decoding according to one of the G.711, G.722, G.728 standards (col. 14, lines 23-

32).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the combined audio conferencing system of Botzko and Celli with

the teaching of Leondires in identifying one of the standards for use in encoding such that

conferencing system of Botzko is further operable to identify a coding standard used by a

participant's end-user device to encode input media information and to encode output media

information for communication to the participant's end-user device using the identified coding

standard.

The motivation to do so is to determine the corresponding processing requirements

needed for each encoding format.

Regarding claims 35, 36, the combined system of Botzko and Celli discloses all the

aspects of the claimed invention as set forth in the rejection of claim 40 above, except fails to

disclose the mixing processor and the first media transformation processor are separate digital

signal processors (DSPs)/integrated circuits.

However, Leondires discloses an audio-video conferencing system wherein the encoder

and the mixer are separate DSPs/Integrated Circuits (one DSP/Integrated Circuits 260 for

mixing, another DSP/Integrated Circuits 266 for encoding audio signals, col. 14, lines 23-29, col.

17, lines 16-21, 36-41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the combined audio conferencing system of Botzko and Celli with

the teaching of Leondires in using separate DSPs/integrated circuits for the mixer and the

encoder such that the mixer of Botzko will be one DSP/integrated circuit and the encoder of

Botzko will be another DSP/integrated circuit.

The motivation to do is to allocate each DSP to a particular function to avoid using

electronic hardware.

Response to Arguments

8.   Applicant's arguments, see page 12, lines 1-15, page 12, lines 16-17, filed on 5/10/2006,

with respect to the rejection(s) of claim(s) 38, 2-4, 7, 39, 9-11, and 14 under 35 U.S.C. 102(a), 35

U.S.C. 102(e), and page 15, lines 3-17 with respect to the rejection(s) of claim(s) 40, 32-34, and

37 under 35 U.S.C. 102(a), 35 U.S.C. 102(e), have been fully considered and are persuasive.

Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made such that

claims 2, 7, 9, 14, 38-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Botzko et al.

(USP 6,141,597), claims 3-4, 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Botzko et al. in view of Gregory, III et al. (USP 5,793,415), claims 5-6, 12-13 are rejected

under 35 U.S.C. 103(a) as being unpatentable over Botzko et al. in view of Leondires et al. (USP

5,841,763), claims 32-33, 37, 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Botzko et al. in view of Celli (USP 5,020,098), and claims 34-36 are rejected under 35 U.S.C.

103(a) as being unpatentable over Botzko et al. in view of Celli, and in further view of Leondires

et al. (USP 5,841,763).

Conclusion

9.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kevin Mew whose telephone number is 571-272-3141. The

examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RICKY Q. NGO
SUPERVISORY PATENT EXAMINER

Kevin Mew   KM
Work Group 2616